

DETAILED ACTION

1. Applicant's amendment dated September 10, 2009, responding to the Final Office action mailed June 10, 2009 provided in the rejection of claims 1-5, 7-12, 14-19, and 21, wherein claims 1-5, 7-12, 14-19, and 21 have been amended.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Trahms-Neudorfer (Reg. No. 59,282) on October 28, 2009 to further amend claims 1, 8, 14, 15, and 16 (see Examiner's Amendment below) and thus to obviate any potential 35 U.S.C 112, second paragraph issues and to place the claims in the condition for allowance.

4. The application has been amended as follows:

IN THE CLAIMS,

Please amend claims 1, 8, 14, 15, and 16 as follows:

1. (Currently Amended) A method for building an extensible project system for software development by allowing a project flavor with ability to customize parts of a base project system to be applied to the base project system comprising:

providing a base ~~software-development~~ project component object model (COM) object comprising data for creating an extensible ~~software development~~ project system, wherein the base project ~~component~~ COM object implements a base project configuration ~~component-object-model~~ (COM) object that includes configuration properties for the base project COM object, the configuration properties comprising an indication of a build of the extensible project system, the base project COM object implementing an API application-programming interface (API-application programming interface) ~~that is called by the base software-development~~ project COM object to invoke configuration properties of the base project COM object;

providing a flavor COM object comprising data for modifying said base project system for a specific purpose, wherein the flavor COM object includes flavor-specific project configuration properties comprising at least one of a project flavor set, the flavor set comprising a caption of a project node, an icon of a project node, a property allowing a project browse

Art Unit: 2192

object to be completely overridden, a control allowing a project to be renamed, a sort priority control, a property allowing a command to be added, a property allowing a command to be removed, a property allowing a command to be disabled, a filter, a property allowing a default generator given a file extension to be determined, and a property allowing a human-readable generator name to be mapped to a COM object, the flavor COM object implementing an API that is called by the base software development project COM object to invoke flavor-specific project configuration properties of the flavor COM object;

signaling, by the base project component COM object, to the flavor component COM object that the base project configuration component COM object needs to be extended;

creating a flavored project system adapted for said specific purpose by COM-type aggregation with cooperation between COM objects using said base project COM object as a participating component COM object and said flavor component COM object as a controlling COM object; wherein the controlling COM object can replace or enhance interfaces of the participating COM object; and

creating, by the flavor component COM object, a flavored base software-development project configuration component COM object by COM-type aggregation that determines which implementation of said APIs to be used and allows said flavor COM object to override said base project COM object, wherein at least one configuration property for the base

project ~~component~~ COM object is overridden by a corresponding flavor-specific project configuration property.

2. (Previously Presented) The method of claim 1, where said at least one flavor COM object comprises at least a first flavor COM object and a second flavor COM object, and where said step of creating a flavored project system comprises:

creating an intermediary COM object by aggregating said first flavor COM object as a controlling COM object and said base project COM object as a participating COM object; and

creating a flavored project system by using said second flavor COM object as a controlling COM object and said intermediary COM object as a participating COM object.

3. (Previously Presented) The method of claim 1 where said step of creating a flavored project system comprises allowing at least one interface of said base project to be modified by said flavor COM object.

4. (Previously Presented) The method of claim 3 where said step of creating a flavored project system comprises allowing a value for at least one property stored in said at least one interface of said base project to be modified by a value for said at least one property stored in an interface of said flavor COM object.

5. (Previously Presented) The method of claim 1 where said step of creating a flavored project system comprises allowing at least one interface of said base project to be replaced by said flavor COM object.

6. (Canceled)

7. (Previously Presented) The method of claim 1, wherein said flavored base project configuration COM object includes an extender interface, said creation of a project system further comprising:

providing an extender site COM object associated with said extender interface.

8. (Currently Amended) A system for building an extensible project system for software development by allowing a project flavor with ability to customize parts of a base project system to be applied to the base project system, comprising:

a processor;

a process configured to instantiate a base ~~software-development~~ project component object model (COM) object comprising data for creating an extensible project system, wherein the base project COM object implements a base project configuration COM object that includes configuration properties for the base project COM object, the configuration properties comprising ~~at least one of~~ a configuration set, the configuration set comprising an indication of a build of the extensible project system, an output file to be created, and an indication as to where the output file will be placed, the base project COM object implementing an API (application programming interface) ~~that is called by the base software development~~ project COM object to invoke configuration properties of the base project COM object;

a process configured to instantiate at least one flavor COM object comprising data for modifying said base project COM object system for a specific purpose, wherein the at least one flavor COM object includes flavor-specific project configuration properties, the flavor COM object implementing an API that is called by the base ~~software-development~~ project COM object to invoke flavor-specific project configuration properties of the flavor object;

a process in the base project COM object configured to signal the at least one flavor COM object that the base project configuration COM object needs to be extended;

a process configured to generate a flavored ~~software-development~~ project system for said specific purpose by ~~component~~ COM-type object aggregation with cooperation between COM objects using said base project COM object as a participating COM object and one of said at least one flavor COM objects as a controlling COM object, wherein the controlling COM object can replace or enhance interfaces of the participating COM object; and

a process in the at least one flavor COM object configured to generate a flavored base ~~software-development~~ project configuration ~~component~~ COM object by COM-type aggregation that determines which implementation of said APIs to be used and allows said flavor COM object to override said base project COM object, wherein at least one configuration property for the base project COM object is modified by a corresponding flavor-specific project configuration property.

9. (Previously Presented) The system of claim 8, where said at least one flavor COM object comprises at least a first flavor COM object and a second flavor COM object, and where said aggregator further comprises:

a first aggregator for creating an intermediary COM object by aggregating said first flavor COM object as a controlling COM object and said base project COM object as a participating COM object; and

a second aggregator for creating a flavored project system by using said second flavor COM object as a controlling COM object and said intermediary COM object as a participating COM object.

10. (Previously Presented) The system of claim 8 where said aggregator causes at least one interface of said base project to be modified by said flavor COM object.

11. (Previously Presented) The system of claim 10 where said aggregator causes a value for at least one property stored in said at least one interface of said base project to be modified by a value for said at least one property stored in an interface of said flavor COM object.

12. (Previously Presented) The system of claim 8 where said aggregator causes at least one interface of said base project to be replaced by said flavor COM object.

13. (Canceled)

14. (Currently Amended) The system of claim 8, wherein said flavored base project configuration COM object includes an extender interface, said project system further comprising:

an extender site ~~component~~ COM object associated with said extender interface.

15. (Currently Amended) A computer-readable storage medium for building an extensible project system for software development by allowing a project flavor with ability to customize parts of a base project system to be applied to the base project system, said computer readable storage medium storing instructions for causing a computer to perform the steps of comprising:

providing a base ~~software development~~ project component object model (COM) object comprising data for creating an extensible project system, wherein the base project COM object implements a base ~~software~~

~~development~~ project configuration COM object that includes configuration properties for the base project COM object, the configuration properties comprising ~~at least one of~~ a configuration set, the configuration set comprising an indication of a build of the extensible project system, an output file to be created, and an indication as to where the output file will be placed, the base project COM object implementing an API (application programming interface) ~~that is called by the base software development project COM object to invoke configuration properties of the base project COM object;~~ ~~that is called by the base software development project COM object to invoke configuration properties of the base project COM object;~~

providing at least one flavor COM object comprising data for modifying said project COM object system for a specific purpose, wherein the at least one flavor COM object includes flavor-specific project configuration properties, the flavor COM object implementing an API that is called by the base ~~software development~~ project COM object to invoke flavor-specific project configuration properties of the flavor object;

signaling by the base project COM object to the at least one flavor COM object that the base project configuration COM object needs to be extended;

creating a flavored software development project system for said specific purpose by COM-type object aggregation with cooperation between COM objects using said base project COM object as a participating COM object and one of said at least one flavor COM objects as a controlling COM object, wherein the controlling COM object can replace or enhance interfaces of the participating COM object; and

creating, by the at least one flavor COM object, a flavored base ~~software development~~ project configuration COM object by COM-type aggregation that determines which implementation of said APIs to be used and allows said flavor COM object to override said base project COM object, wherein at least one configuration property for the base project

COM object is modified by a corresponding flavor-specific project configuration property.

16. (Currently Amended) The computer-readable storage medium of claim 15, where said at least one flavor COM object comprises at least a first flavor COM object and a second flavor COM object, and where said step of creating a flavored project system comprises:

creating an intermediary COM object by aggregating said first flavor COM object as a controlling COM object and said base project COM object as a participating COM object; and

creating a flavored project system by using said second flavor COM object as a controlling COM object and said intermediary COM object as a participating ~~component~~ COM object.

17. (Previously Presented) The computer-readable storage medium of claim 15 where said step of creating a flavored project system comprises allowing at least one interface of said base project to be modified by said flavor COM object.

18. (Previously Presented) The computer-readable storage medium of claim 17 where said step of creating a flavored project system comprises allowing a value for at least one property stored in said at least one interface of said base project to be modified by a value for said at least one property stored in an interface of said flavor COM object.

19. (Previously Presented) The computer-readable storage medium of claim 15 where said step of creating a flavored project system comprises allowing at least one interface of said base project to be replaced by said flavor COM object.

Art Unit: 2192

20. (Canceled)

21. (Previously Presented) The computer-readable storage medium of claim 15, wherein said flavored base project configuration COM object includes an extender interface, said creation of a project system further comprising:

providing an extender site COM object associated with said extender interface.

- END OF AMENDMENT -

Allowable Subject Matter

5. Claims 1-5, 7-12, 14-19, and 21 (renumbered as 1-18) are allowed.

6. The following is an examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fails to suggest

" ...

providing a base project component object model (COM) object comprising data for creating an extensible project system, wherein the base project COM object implements a base project configuration COM object ... the base project COM object implementing an API (application programming interface) called by the base project COM object to invoke configuration properties of the base project COM object;

providing a flavor COM object comprising data for modifying said base_project system for a specific purpose, wherein the flavor COM object includes flavor-specific project configuration properties comprising a project flavor set ... the flavor COM object implementing an API called by the base project COM object to invoke flavor-specific project configuration properties of the flavor COM object;

signaling, by the base project COM object, to the flavor COM object that the base project configuration COM object needs to be extended;

creating a flavored project system adapted for said specific purpose by COM-type aggregation with cooperation between COM objects using

said base project COM object as a participating COM object and said flavor COM object as a controlling COM object, wherein the controlling COM object can replace or enhance interfaces of the participating COM object; and

creating, by the flavor COM object, a flavored project configuration COM object by COM-type aggregation that determines which implementation of said APIs to be used and allows said flavor COM object to override said base project COM object ...", as recited in independent claims 1 and similarly recited in independent claims 8 and 15.

7. Claims (2-5, 7), (9-12, 14) and (16-19, 21) are considered allowable by virtue of their dependence on allowable independent claims 1, 8, and 15 respectively.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is (571) 270-1240. The examiner can normally be reached on 8:00-5:30 (EST/EDT), Monday through Friday.

Art Unit: 2192

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ben C Wang/
Examiner, Art Unit 2192

/Michael J. Yigdal/
Primary Examiner, Art Unit 2192